12.3.138
8-31-01

August 31, 2001 CERTIFIED MAIL

Re: Notification of Groundwater Contamination in the Georgetown Area and Distribution of a Survey to Determine Potential Pathways for People to be Exposed to Groundwater.

Dear Neighbor:

This notice is being sent to all property owners and occupants that own, work, or reside in buildings above potentially contaminated groundwater in your neighborhood. The contamination may be attributable to historical operations at the Philip Services Corporation (PSC) Georgetown facility on 734 S. Lucile Street in Seattle.

The Lucile Street facility is a dangerous waste management facility that operates under federal and state environmental permits. In the ordinary course of business, the facility bulks, stores and blends wastes before properly and legally sending the waste for disposal at other permitted facilities around the country. The facility has operated at this site under strict regulatory supervision by the United States Environmental Protection Agency Region X, the Washington State Department of Ecology, and many local regulatory agencies.

As part of the facility's operating permit, which was jointly issued by the EPA and Ecology, PSC was required to conduct a facility investigation to characterize soil and groundwater contamination at the site and to implement interim and final corrective measures to address contamination.

The contamination is a result of historical operations at the site including storage of hazardous materials when the facility was used to manufacture paint, stain wood and, later as a dangerous waste management facility in 1970. Underground storage tanks were installed during the 1950s to store hazardous materials. These tanks and substantial surrounding soil were removed in 1987. When the tanks were removed, it became apparent that the tanks and associated piping had leaked chemicals into the soil and, eventually, the groundwater. Currently, the site is capped with a 3 to 6 foot thick microsilicia concrete cover and has an on-site storm water management system to prevent any future release of contaminants to soils or groundwater.

As a result of environmental studies of soil and groundwater at the facility, PSC has found that contaminated groundwater has migrated beyond the property boundary. Groundwater generally flows west to southwest in this area. Soil tests indicate there is no off-site soil contamination but other tests indicate that contaminated groundwater may exist under your property.

Project Manager for this site, Howard Orlean at (206) 553-2851; or the Washington State Department of Ecology contact for the site, Galen Tritt at (425) 649-7280.

Sincerely,

Carolyn Mayer
Corrective Actions Manager
Regulatory Affairs Department
Philip Services Corporation

Enclosures: Survey and Stamped Return Envelope

If you have not received this survey or have not responded to previous mailings, a copy of the survey is attached with a stamped return envelope. Please respond by September 30, 2001 if you have not done so already.

Summary of Results of 2000 Groundwater Sampling

Philip Services Corporation (PSC) continues to investigate groundwater contamination emanating from historical spills and releases at the PSC facility at 734 Lucile Street in Seattle. An extensive investigation of groundwater chemical concentrations at the facility and in the surrounding area was completed in 2000 in order to help define the extent of the contamination so that cleanup efforts will be focused on the appropriate areas. The groundwater investigation included sampling from permanent monitoring wells at and surrounding the PSC facility as well as sampling from temporary monitoring wells located throughout the neighborhood.

This attachment summarizes the results of the 2000 groundwater sampling events. This information is provided to you in order to inform you of the condition of the aquifer near your property. However, the groundwater beneath your property may not contain contaminants at the concentrations indicated in this attachment.

Groundwater in the Georgetown Neighborhood

Near the PSC Georgetown facility, groundwater samples were collected from temporary and permanent monitoring wells in one of three different aquifers that exist below the ground surface. PSC refers to these aquifers as the shallow, intermediate and deep aquifers. The depth of the shallow aquifer is between the water table at approximately 7 to 10 feet below ground surface (bgs) to approximately 35 feet bgs. The depth of the intermediate aquifer is approximately 35 feet bgs to the top of a silt confining unit, which varies from approximately 55 feet near the PSC facility to more than 120 feet bgs towards the Duwamish Waterway. Below the silt confining layer is the deep aquifer.

While groundwater in the shallow and intermediate aquifers is connected and can mix, groundwater in the deep aquifer is separated from groundwater in the two upper aquifers by a layer of silt and clay. This means that groundwater in the deep aquifer does not mix with groundwater in the shallow and intermediate aquifers.

Permanent Monitoring Wells

Eighteen permanent monitoring wells located on the PSC property and 18 monitoring wells located in the block surrounding the facility were sampled quarterly during 2000. The location of these monitoring wells is shown in Figure 1. Groundwater samples from each aquifer were analyzed for volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), metals, total petroleum hydrocarbons (TPH) and cyanide.

A number of chemicals including chlorinated solvent compounds and petroleum compounds have been detected in groundwater samples from the shallow and intermediate aquifers. The concentrations of these compounds were compared with conservative screening levels developed to be protective of the consumption of groundwater. Table 1 presents a summary of the chemicals which were detected at least once in on-site wells at concentrations that exceed the screening levels. Table 2

Georgetown Community Questionnaire

1. What is your street address? 5901 E. Marginal Way S.
2. Is this a residence or business? Business
3. If it is a business, is it a commercial or industrial business? Industrial Business
4. What is the nature of the business? Manufacuring Corrugated Containers
5. What is the approximate square footage of the building? 127,000
6. How old is the building? 49 years
7. Does the building have a basement? No

If not, go to question 8.

If so, what is the depth of the basement that is below ground surface? _____

What is the height of the basement from floor to ceiling? _____

Are there windows or doors leading outside in the basement? _____

If so, approximately how many square feet do they occupy? _____

How often do you open the windows or doors? _____

What is the basement constructed of?

- ☐ Concrete slab
- ☐ Concrete block
- ☐ Dirt floor
- ☐ Other, please describe _____

Does the basement ever flood with water due to the high water table? _____

If so, how often and how much water accumulates? _____

_____

Is there a sump or floor drain in the basement? ☐ Sump ☐ Floor Drain

If so, how often does the water accumulate in the sump or floor drain? _____

How is the water drained from the sump or floor drain when it accumulates?

- ☐ Automatic pump
- ☐ Manual pump or vacuum
- ☐ Other, please describe _____

Approximately how large is the sump or floor drain? _____

Does anyone live or work in the basement of the building? _____

Do you store sources of chlorinated or petroleum hydrocarbons in your basement, such as paints, solvents, fuels, chemicals or cleaners? If so, please describe: _____

_____

TABLE 1
Summary of Observed Groundwater Concentrations
On-Site Permanent Monitoring Wells
PSC Georgetown Facility

Compound	Range of Observed Concentrations (ug/L)		Lowest Screening Level
	Maximum	Minimum	
Shallow Aquifer			
1,1,1-Trichloroethane	1980	ND	200
1,1,2-Trichloroethane	12.6	ND	0.2
1,1-Dichloroethane	1460	ND	5
1,1-Dichloroethene	106	ND	0.046
1,2,4-Trichlorobenzene	3.16	ND	0.019
1,2,4-Trimethylbenzene	873	ND	12
1,2-Dibromo-3-chloropropane	0.94	ND	0.0313
1,2-Dichloroethane	1100	ND	0.12
1,2-Dichloropropane	2.36	ND	0.16
1,3,5-Trimethylbenzene	755	ND	12
1,4-Dichlorobenzene	6.04	ND	0.5
2,4-Dimethyl-phenol	745	ND	320
2-Butanone	2250	ND	1900
4-Methyl-2-pentanone	2790	ND	160
4-Methylphenol	1930	ND	80
Aroclor 1232	25.9	ND	0.034
Aroclor 1242	1.48	ND	0.034
Benzene	103	ND	0.35
Bis(2-chloro-ethyl)ether	5.53	ND	0.0098
bis(2-Ethylhexyl)phthalate	13.6	ND	3
Carbazole	17.9	ND	3.4
Chloroethane	896	ND	4.6
Chloroform	82	ND	0.16
cis-1,2-Dichloroethene	14500	ND	61
Ethylbenzene	20300	ND	30
Hexachloroethane	8.27	ND	4.8
m,p-Xylene	14500	ND	20
Methylene chloride	236	ND	4.3
Naphthalene	362	ND	6.2
N-Nitrosodi-n-propylamine	2.24	ND	0.0096
n-Propylbenzene	172	ND	61
o-Xylene	2960	ND	20
Pentachlorophenol	32.9	ND	0.56
sec-Butylbenzene	202	ND	61
Styrene	47.4	ND	1.46
Tetrachloroethene	56.5	ND	0.7
Toluene	66900	ND	40
trans-1,2-Dichloroethene	7120	ND	100
Trichloroethene	35	ND	1.6
Vinyl chloride	5590	ND	0.023
Intermediate Aquifer			
1,1,2-Trichloroethane	0.95	ND	0.2
1,1-Dichloroethane	6.86	ND	5
1,1-Dichloroethene	4.03	ND	0.046
1,2-Dichloroethane	2.86	ND	0.12
1,4-Dichloro-benzene	1.06	ND	0.5
2,4-Dimethyl-phenol	444	ND	320
4-Methylphenol	2230	ND	80
Aroclor 1016	2.73	ND	0.96
bis(2-Ethylhexyl)phthalate	14.9	ND	3
cis-1,2-Dichloroethene	102	ND	61
Tetrachloroethene	4.94	ND	0.7
Trichloroethene	146	ND	1.6
Vinyl chloride	18.8	ND	0.023
Deep Aquifer			
1,1-Dichloroethene	0.57	ND	0.046

Notes:
ND = not detected
ug/L = micrograms per liter = parts per billion
Lowest screening level = lowest value of EPA's Maximum Contaminant Levels and Goals (MCLs and MCLGs), and Ecology's MTCA Method A and B Cleanup Levels.

TABLE 3
Summary of Observed Groundwater Concentrations
Temporary Off-site Monitoring Wells
PSC Georgetown Facility

Compound	Range of Observed Concentrations (ug/L)		Lowest Screening Level
	Maximum	Minimum	
Groundwater located less than 20 feet bgs			
1,1,1-Trichloroethane	967	ND	200
1,1,2-Trichloroethane	12.5	ND	0.2
1,1-Dichloroethane	1270	ND	5
1,1-Dichloroethene	55.8	ND	0.046
1,2-Dichloroethane	465	ND	0.12
4-Methyl-2-pentanone	1290	ND	160
Benzene	48	ND	0.35
Carbon tetrachloride	32.7	ND	0.17
Chloroethane	1280	ND	4.6
Chloroform	29.6	ND	0.16
Chloromethane	12.7	ND	1.5
cis-1,2-Dichloroethene	5650	ND	61
Ethylbenzene	16300	ND	30
m,p-Xylene	13900	ND	20
Methylene chloride	80.7	ND	4.3
o-Xylene	3120	ND	20
Tetrachloroethene	18.7	ND	0.7
Toluene	36900	ND	40
trans-1,2-Dichloroethene	173	ND	100
Trichloroethene	122	ND	1.6
Vinyl chloride	8710	ND	0.023
Groundwater located greater than 20 feet bgs			
1,1,1-Trichloroethane	446	ND	200
1,1,2,2,-Tetrachloroethane	61.3	ND	0.055
1,1,2-Trichloroethane	2.97	ND	0.2
1,1-Dichloroethane	1560	ND	5
1,1-Dichloroethene	1380	ND	0.046
1,2-Dichloroethane	37.2	ND	0.12
1,2-Dichloropropane	321	ND	0.16
4-Methyl-2-pentanone	806	ND	160
Benzene	73.6	ND	0.35
Chloroethane	1530	ND	4.6
Chloroform	13.6	ND	0.16
Chloromethane	51.6	ND	1.5
cis-1,2-Dichloroethene	85400	ND	61
Ethylbenzene	8890	ND	30
m,p-Xylene	4410	ND	20
Methylene chloride	155	ND	4.3
o-Xylene	813	ND	20
Styrene	6.06	ND	1.46
Tetrachloroethene	40.3	ND	0.7
Toluene	13100	ND	40
trans-1,2-Dichloroethene	12800	ND	100
Trichloroethene	143000	ND	1.6
Vinyl chloride	67200	ND	0.023

Notes:
ND = not detected
ug/L = micrograms per liter = parts per billion
Lowest screening level = lowest value of EPA's Maximum Contaminant Levels and Goals (MCLs and MCLGs), and Ecology's MTCA Method A and B Cleanup Levels.

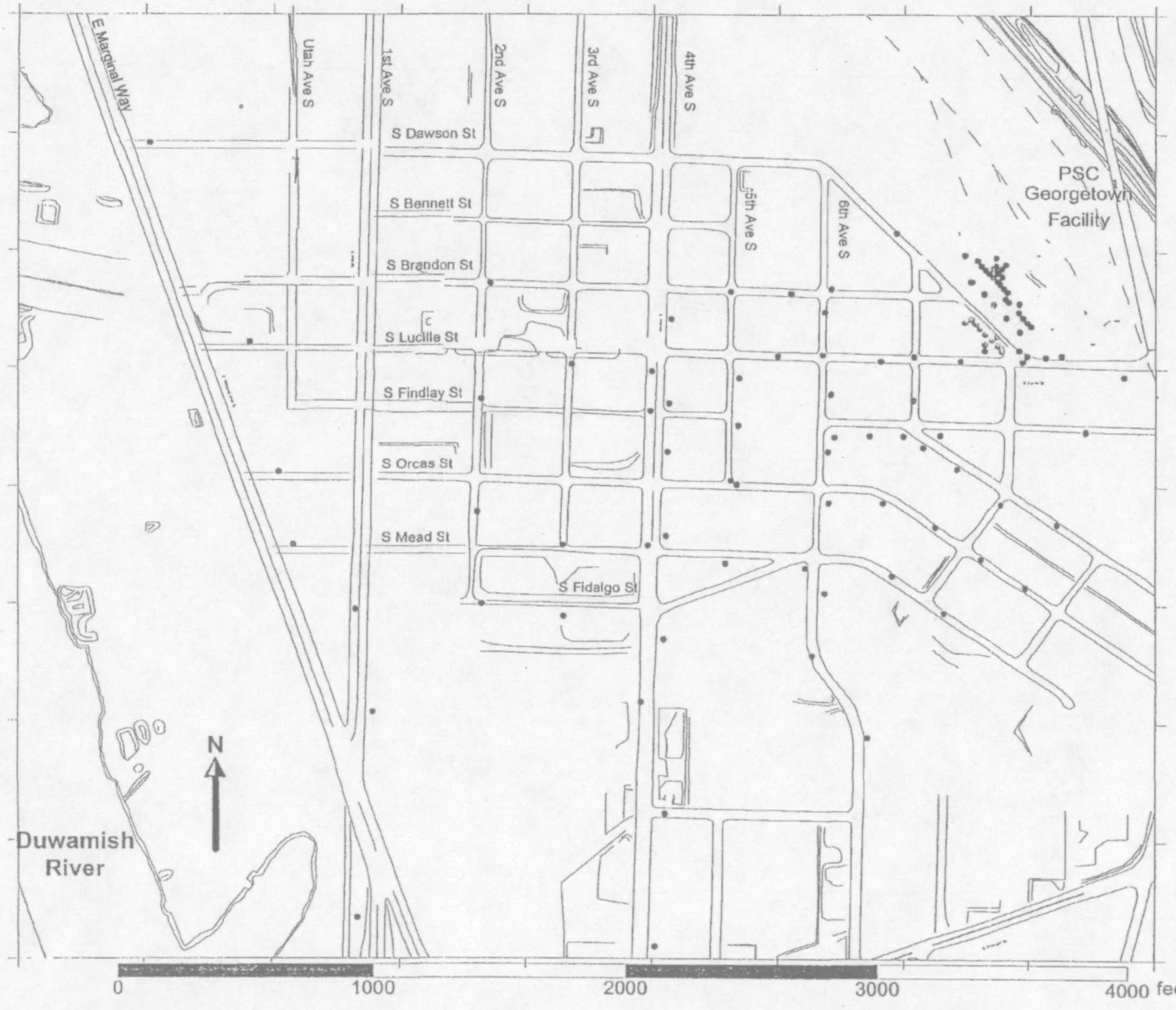

Figure 2
Location of Temporary Monitoring Wells

• Temporary monitoring wells installed in 2000

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